

# MIX










# MATE

User Manual—v2.1.1

Updated July 2012

1. Title
2. Contents
3. [Quick start guide](#)
4. [Glossary & Data storage](#)
5. [Home](#)
6. [Recipe](#)
7. [How do I change my recipe?](#)
8. [Targets](#)
9. [Feed List](#)
10. [Deliveries](#)
11. [Budgets/Contracts](#)
12. [Multiply/Divide & New/Delete Recipe](#)
13. [Farm Snapshot](#)
14. [Diet Analysis](#)
15. [Annual Plan](#)

*Click on the subject to get detailed information.*

1. Register the Mate app with Farmmates.com.
2. [Log in.](#)
3.  [Setup your feed list or copy in your farm advisors feed list.](#)
4.  [Create or modify the recipes to what you are feeding or want to feed.](#)
5.  [Set Targets for each recipe](#)
6.  [Analyse your recipe in the Analysis screen and modify to achieve your targets](#)
7.  [Record feed deliveries](#)
8.  [Create “Snapshots” to record what you were feeding for later analysis by you or your farm advisor](#)
9.  [Regularly ensure data is Exported to Farmmates.com for backup](#)

**DM** - Drymatter

**CP** - Crude Protein

**ME** - Metabolisable energy

**NDF** - Neutral Detergent Fibre\*

\*This is NDF. If you need to calculate FNDF (Forage NDF) then simply set all concentrates in the recipe to zero NDF. IMPORTANT NOTE: When you select a feed for your recipe, MixMate records its values in the recipe e.g. DM, CP, NDF. If you edit the values in the feed list they do NOT change the recipe values. Delete the feed from the recipe and re-select it to bring in the new values.

“Water” is treated as Wet kgs in the entire program.

### Export:

Exports recipes, feed list and creates a public feed list if selected. Client list is exported from the Client screen.

### Import:

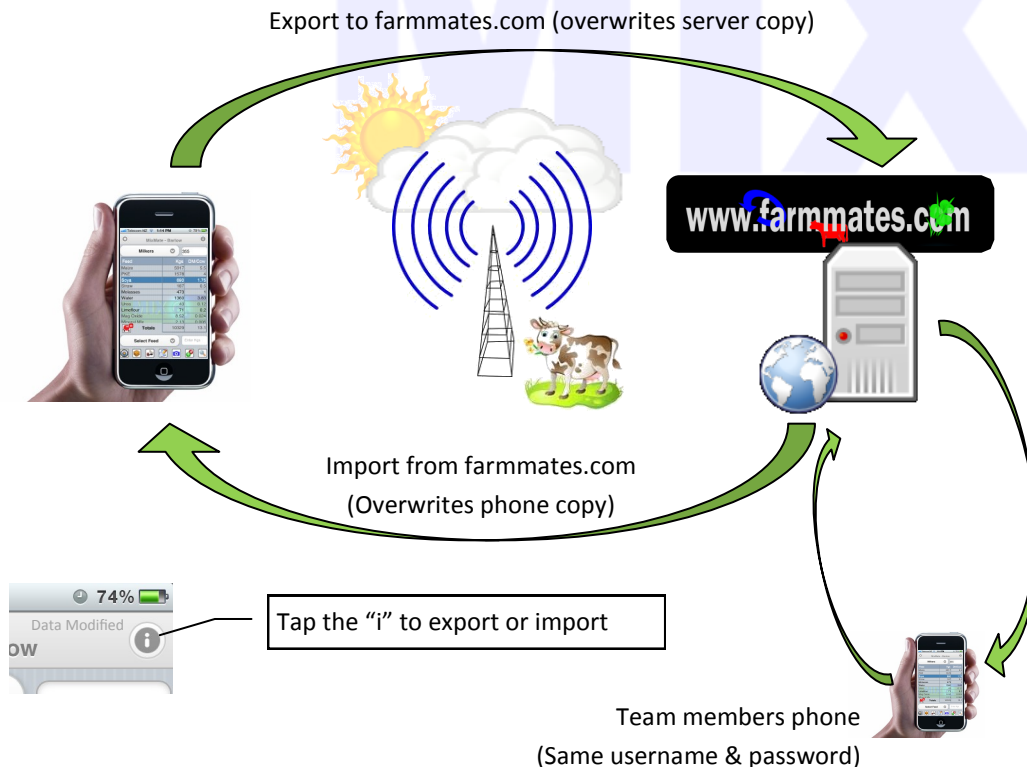
The Import option from the recipe screen imports everything except feed list and client list. Import these lists from their respective screens.

### 'Import on Startup'

If you put info into your phone it automatically sends it to farmmates.com on exit of most screens (when connected) *(To keep the program running fast it does not export when editing in the main recipe screen)* then as soon as you restart MixMate on any phone, and sign in, it looks for the backup copy on server and automatically imports it. So if a team member does a feed analysis on a recipe and Saves on exiting the screen on their phone then that is automatically sent to the server. Then when you start MixMate it downloads the new recipes info to your phone.

### I want to copy my farm advisors feed list?

In the feed list select Import-Copy. Type in the username of your farm advisor/friend (who has selected to make their feed list public) and tap OK. Their feed list will be copied in.



MixMate is downloaded from the web and installs on your phone. It then stores its data that you enter on your phone in an area protected from other apps. The industry calls this protection "Sandboxing". Using MixMate is the only way of seeing this data and if you didn't backup your data you would lose it if/when you lost your phone.

The Mate apps have an Export/Import feature where your data is exported to [www.farmmates.com](http://www.farmmates.com) as backup. *(The farmmates.com server will keep your data for one month after your registration is expired.)* From here you can retrieve your data onto another device or have other members of your team retrieve the data for use on the farm. You will need to use the same login ID & password each time.

You are paying for a registration, not the app on your device, so you are free to use that on as many devices as you wish. e.g. if you have a large farm with 10+ staff then they will all have access to the data with that registration. With this in mind it is recommended that your password is not a personal password but a team appropriate password.

Retrieving data will overwrite ALL the data on your phone with the data on the farmmates.com server. It is recommended that staff or viewers of your data check the "Import on startup" option so they always have the latest version of your data. If you are the person in charge then take care importing if you are unsure which user has last backed up the data. You can use the Undo Import option if the Imported data is not what you were expecting.

Mate Apps although have small files will use mobile data allowance Exporting and Importing. If you have Mobile Data turned off you can export/import using your home Wi-Fi network once in range. This will use your home phone line data allowance (most people have spare) and not your mobile data allowance.

When you first enter MixMate you are presented with the Home Screen. Here you can register with farmmates.com, try out MixMate as a Guest or 'sign in' to use your own details.

Check out which version of MixMate you are running.



The screenshot shows the MixMate mobile app interface. At the top, the status bar displays 'Telecom NZ', '1:25 PM', and '78%' battery. The app title 'Mix Mate' is at the top of the screen. Below it, there's a section titled 'Enter your farm login ID' with a text input field containing 'Bestfarmerever'. Underneath is a 'Password' section with a masked input field. There are two checkboxes: 'Auto login on startup' (checked) and 'Import on startup' (unchecked). At the bottom, there are three buttons: 'Register', 'Guest', and 'Login'. A large, faint 'MIX' watermark is visible in the background.

You can log in here as a guest to try out MixMate before you are registered. No data can be saved.

Register button will take you to the registration screen where you can enter your details.

Press Login once you have entered your login ID and password. MixMate will verify your registration\* then take you to the Recipe screen

\* If no internet access is available you will then have 15 days to use MixMate before a Login online is required. This enables you to use MixMate when you need it even if there is no internet access.

Your login ID is entered here. You choose this in the 'Register' screen. *(Case sensitive)*

Your password is entered here. You choose this in the 'Register' screen also. *(Case sensitive)*

Select Auto login to skip through this screen automatically next time you enter MixMate.

If Import on startup is checked then each time you enter MixMate it will look on the web for a backup copy of your recipes. This is good for staff who always need the latest recipe 'tweaked' by the person in charge of cow diets.

This is the first screen to appear after logging in. Your recipe is entered here, cow numbers changed and this is where you see the 7 MixMate menu icons. How do I enter data?

**Your login ID.**

**Import/Export Message.** Data modified means data has changed since last Export.

The Home button returns you to the Home screen.

Name of the recipe currently selected. Press this to display a list of current recipes

Mixer serviced icon. This icon is a reminder to show when your mixer wagon or feedout wagon is due for a grease and service. A red wagon means a service is overdue and a green wagon denotes wagon does not need servicing yet. Change the service interval in the Targets screen.

Press this to see a list of feeds to enter into your recipe.

**IMPORTANT NOTE:** When you select a feed for your recipe, MixMate records its values in the recipe e.g. DM, CP, NDF. If you edit the values in the feed list they do NOT change the recipe values. Delete the feed from the recipe and re-select it to bring in the new values.

Goes to the Diet targets screen.

Goes to the Feed list screen.

Goes to the Deliveries screen.

Recipe icon. Gives you the option to create a new recipe or delete an old recipe.

Goes to the Farm Snapshot screen.

Days since last snapshot; Blue = Done, Green = Due, Red = Overdue

Press this to multiply/divide your ration by 2 or 3.

Goes to the Diet Analysis screen.

Export/Import your recipes from farmmates.com. If a team member has changed a recipe and exported it, you can Import it here.

Type in the mob/herd size here. MixMate will automatically calculate the Total Kgs for the mob.

Recipe table showing feed totals and DM (Drymatter) /Cow. Blue row is the highlighted row and light tan rows are feeds with 100% DM. eg minerals and other non feed inputs.

If water is in the recipe it is calculated as wet kgs (not DM) and highlights in blue.

Recipe totals. Total wet kgs and DM/Cow

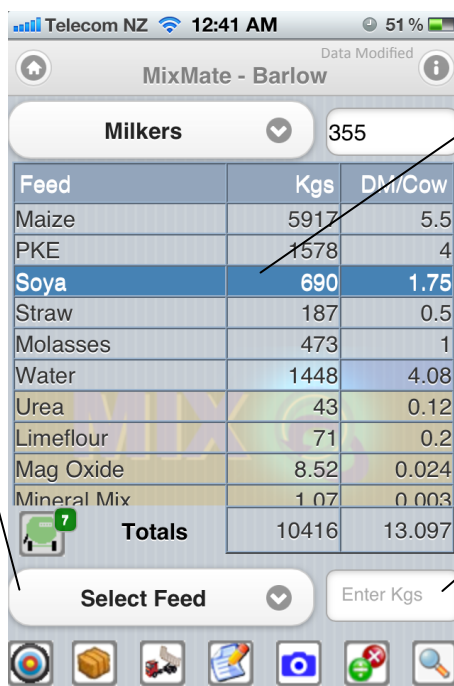
Type in the kgs here and the value will appear in the blue highlighted cell. To enter 3 grams type in .003

Feed	Kgs	DM/Cow
Maize	5800	5.5
PKE	1353	3.5
Soya	580	1.5
Straw	147	0.4
Molasses	371	0.8
Water	1420	4.08
Urea	42	0.12
Limeflour	70	0.2
Mag Oxide	6.96	0.02
Mineral Mix	1.04	0.003
<b>Totals</b>	<b>9801</b>	<b>12.073</b>

**IMPORTANT NOTE:** When you select a feed for your recipe, MixMate records its values in the recipe e.g. DM, CP, NDF. If you edit the values in the feed list they do NOT change the recipe values. Delete the feed from the recipe and re-select it to bring in the new values.

## HOW DO I CHANGE MY RECIPE?

1. If the feed is not in the recipe then tap the 'Add Feed' button located here then select the feed from the feed list that displays by tapping here.



Feed	Kgs	DM/Cow
Maize	5917	5.5
PKE	1578	4
<b>Soya</b>	<b>690</b>	<b>1.75</b>
Straw	187	0.5
Molasses	473	1
Water	1448	4.08
Urea	43	0.12
Limeflour	71	0.2
Mag Oxide	8.52	0.024
Mineral Mix	1.07	0.003
<b>Totals</b>	<b>10416</b>	<b>13.097</b>

2. Highlight the feed to change

NB: If you tap the highlighted cell again you can delete, change it's order in the recipe or order more of this feed by email.

It will also give you the total of the feeds below & including this feed and total below. This is handy to total all minerals or all feeds only.

3. Enter in the kgs or grams to enter.  
Either total wet kgs or kgs DM/cow.

To enter grams/cow divide by 1000

For 3 grams type in .003

For 25 grams type in .025

For 100 grams type in .1

4. On the highlighted feed, tap in the cell you wish to enter, either Wet kg or DM, and the figure you typed in will enter and calculate the recipe totals.

The Home button returns you to the Recipe screen.

Total diet DM/Cow including Grass

Ration only DM% excluding grass  
eg DM/Wet Kgs

Total grams of diet crude protein

Total diet crude protein % eg CP/Total DM

Total diet metabolisable energy.

Total diet NDF: Neutral Detergent Fibre (See note on page 3)



Use this screen to set the upper and lower targets of your diet. These targets determine the highlights in the analysis screen and the values of the analysis graph.

Tip: The tighter the target range the easier it is to adjust your diet by dragging the bars of the Analysis graph.

Telecom NZ 12:27 PM 75%

## Analysis Targets

Set the recipe upper and lower targets.

	Lower	Upper
DM/Cow	17	18
Mix DM%	44	46
CP Grams	2,000	5,000
CP%	19	20.5
ME	175	185
NDF (kg)	2.5	3
Herd Liveweight		500
Mixer wagon maintenance interval (days)		25

Hint: Keeping the targets limits close will make adjusting with graph easy.

Done

Average herd live weight. Used to calculate diet DM as a percentage of live weight.

Set the number of days you need to grease or service your mixer/feed wagon. This figure will determine when the Mixer icon turns red on the recipe screen. Enter 1000 days to hide the icon.

Saves the displayed targets and returns to the Recipe screen.



The Home button returns you to the Recipe screen.

Feed list



Use this screen to enter your feed list or edit the feed values.

Important: Changing the feed values will NOT change the feeds already in the recipes. Delete the feed in the recipe and re-select it to update the feed values.

Export/Import your feed list from farmmates.com. You may Copy other users feed lists if they are set to 'public'.

To get, for example, your advisors feed list, select copy, type in their username and MixMate will copy in their feed list. Note: Their feed values will not affect any feed values already recorded in your recipes. See note on page 'How do I change my recipe?'

Feed List					
	Feed Name	DM%	CP%	ME	FNDF
1	Calf meal 16%	90	16	12	2
2	Cotton Seed	90	47	10	0
3	DDG	90	25	1	0
4	Grass Silage	33	20	1	30
5	Hay	75	10	10	50
6	Kiwifruit	15	16	15	10
7	Limeflour	100	0	0	0
8	Mag Chloride	100	0	0	0
9	Mag Oxide	100	0	0	0
10	Maize	33	8	11	30
11	Mineral Mix	100	0	0	0
12	Molasses	75	8	16	0

**Feed name**

DM%  CP%  ME  FNDF

☐ Public

Type in the name of the feed here

Enter the values of the feed here.

Check this box if you want to allow other users to Import your feed list. Suitable for farm advisors or multiple user situation.

Deletes the selected feed

Update saves the feed and its values to the feed list.



Use this screen to keep a record of feed delivered to your farm.

Press this button to display only the selected feed. Use this to total all 1 feed for the season.

The Back button returns you to the Recipe screen. Leaving this screen will Export the data to farmmates.com if there is an internet connection.

The dates, to & from, to display records between.

Feed delivered records

Tap the supplier square to delete a supplier.

Type in the number of cows and see the total tonnes and kgs/cow

Date of the feed delivery

Select the feed delivered

Takes you to the [Budgets & Contracts](#) screen.

Select the source of the feed. Select Add New to enter in a new feed supplier.

Deletes the selected delivery

Select a contract or budget to record load against. Select None to ignore. See [next page](#).

Saves the entered delivery

Enter tonnes delivered. Enter the price/tonne if saving to a budget or contract. Selecting a contract will bring in the contract price.



Telecom NZ 12:16 PM 83%

**Feed Delivered**

From 01/01/12 To 16/07/13

Date	Feed Name	Qty	Source
12/07/12	Soya	29	Gavins
12/07/12	PKE	29	Gavins
07/06/12	PKE	29	Gavins
07/06/12	Soya	29	Gavins
20/06/12	PKE	29	Gavins

Filter: (11 of 11)

Cows  Tonnes 282 Kgs/Cow

**Feed Delivered** PKE

**Supplier** Gavins

**Budget/Contract** PKE

Date 06/09/12 Tonne 29 \$/Tn 255

Budget Del Enter

# BUDGETS/CONTRACTS MIX



Use this screen to assign feed delivered to a contract or budget. This helps you identify how much is left on your feed contract or how far over or under planned budget you are.

iPad screen shown to display all the columns. A PC in Google Chrome will display the complete screen, similar to an iPad. Just remember to import your recipes first.

The Back button returns you to the Deliveries screen. Remember leaving the deliveries screen will Export the data to farmmates.com if there is an internet connection.

The Used and Left columns are automatically calculated when you enter feed deliveries.

List of Contracts and Budgets

iPad 12:31 PM 82%

**Budgets & Contracts**

	Feed	Tonne	Used	Left	\$/T	Start	Finish	Supplier	Type	Note	\$ Alloc.	\$ Used	-\$117k under
es	Molasses	150	0	150	348	01/01/12	20/10/12	Agrifeeds	Budget		\$52200	\$0	-\$52200
	<b>PKE</b>	<b>59</b>	<b>19</b>	<b>40</b>	<b>255</b>	<b>01/01/12</b>	<b>31/12/12</b>	<b>Gavins</b>	<b>Contract</b>		<b>\$15045</b>	<b>\$4845</b>	<b>-\$10200</b>
	Soya	84	0	84	655	01/05/12	31/07/12	Gavins	Contract		\$55020	\$0	-\$55020

Enter Tonne

+ New x Del ✓ Enter

Deliveries allocated to... PKE

Date	Feed	Qty	\$/t	Supplier
07/09/12	PKE	19	255	Gavins
		Tonne	\$(000)	
	Actual	19	\$5k	
	Contract	59	\$15k	
	Difference	-40	-\$10k	Under

Tap to delete a budget or contract.

Tap for a new budget or contract.

Tap on the cell you wish to enter. Contracts highlighted yellow. Tap the highlighted cell again to make the cells info appear in the entry field.

Financial data. Total \$ allocated to the budget, \$ used/spent & the balance remaining. A negative number is under budget, positive is over budget.

Enter in information for the selected cell here and tap enter. When the feed column is selected a drop down list will appear. You cannot change calculated cells like Used, Left, Type and financials.

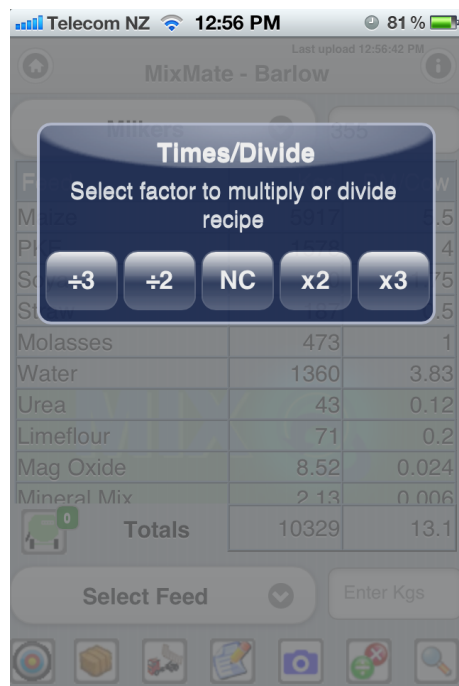
Table showing a list of deliveries allocated to the Budget or Contract with totals displays actual spend and difference to budget.

## MULTIPLY/DIVIDE RATION MIX



Use this feature to divide or multiply the ration by 2 or 3. NC stands for No change or Cancel.

Hint: If your ration is a 24 hour feed ration but you need to know what to put in the wagon over 2 or 3 loads simply divide by x to give you your exact ration accurately. For 4 loads simply divide by 2 twice.



## NEW/DELETE RECIPE MIX



Used to create a new recipe or delete/copy an existing recipe. Selecting New will give you an option to type in the name of a ration.

Hint: Deleted recipe can be recovered by Importing from web only if you have not exported after a deletion.



# FARM SNAPSHOT MIX



Use farm snapshot to "record a snapshot" of your farm for a given period. Record cow movements, diets, health issues and cows supplying just like a diary. The snapshot can be used for reporting to farm advisor, off farm owner or interested parties.

Deletes last entered snapshot.

The Home button returns you to the Recipe screen.

Start date of the snapshot. Use arrow keys to change.

Switch between Milkers and Non-milkers tabs

Shows the recipe/s recorded for the period.

Lock the selected recipe to automatically bring that ration in for new snapshots.

Tally at end of last period. Note: You can only change this on the first record. (*One of those occasions where it pays to get it right first time.*)

Farm grass data. Hint: This data is populated automatically from GrassMate if it exists for this period.

Saves the entered snapshot. You can only save the latest snapshot.

Select either Wkly (Weekly) or 1/3 (1/3 of a month, 10 day) recording period.

Select a ration to record in the snapshot. (You can have multiple recipes)

Calved & Dried off fields are respectively subtracted & added to Non-Milkers tab.

Greyed out fields are calculated and cannot be entered.

Write any diary notes in here.

Telecom NZ 3:30 PM 81%  
Barlow  
(1/1) 1 Aug - 10 Aug  
01/08/12 Wkly 1/3  
Milkers Non-Milkers  
Recipe Milkers  
Prev. Milkers 357 Sold 5 Buy  
Milkers 352 Calved Dried off  
Mastitis 2 In Vat 350 Died  
Lame 2 Not in Vat 2  
Cond. 5 Calf milk (L)  
Score  
Cover 1,900  
Growth  
Grazed Ha/Dav 20  
Note  
Save

Previous Dries tally  
- Sold  
- Died  
- Calved (Milkers tab)  
+ Dried off (Milkers tab)  
= Dries Tally

Milkers Non-Milkers  
Recipe Dries  
Prev. Dries 8 Sold 4 Buy  
+ Dried - Calved  
Dries 4 0 4  
Ylgs 83 0 83  
Calves 98 5 93

Replacement stock tallies  
(Ylgs = Yearlings)



# DIET ANALYSIS MIX

The Home button returns you to the Recipe screen. If you have made changes to the diet MixMate will ask you to Save or Ignore changes. Saving the changes will Export the diet to farm-mates.com if there is an internet connection.

Correct the grass details and view the total diet results. You can adjust the recipe with the arrow buttons and see the effects of the change instantly. Alter the diet in the graph by sliding the bars. (Important Note: The tighter the target range the better the adjustment by graph will work)

Switch between Grass & Supplement tabs (Below)

Total area of AM & PM paddocks

Number of breaks/grazings from the area.  
eg 1.3ha, 2 breaks = 0.65ha to calculate DM

Pre-grazing and post grazing (Residual) DM.

Area in m<sup>2</sup> allocated/cow

Total diet analysis. Cells in white are within set targets. Blue cells are below target and red cells above target. Hit the DM% or FNDF title to adjust feed to centre of ideal target range.

Telecom NZ 12:28 PM 75%

Analysis  
Milkers - 348 Cows

Grass Recipe

	AM	PM		
Ha	1.7	1.3	CP%	24
Breaks	1	1	ME	10
Pre	2,200	2,200	NDF	10
Post	1,500	1,500		
			AM & PM DM	
Area/Cow	86.2 m <sup>2</sup>		DM/ Cow	6.03
CP	3,596 g 19.9%		%LWT	3.6%
NDF	2.65 kg		Lwt 500	
ME	190		DM/Cow	18.1
DM%	42.9%			

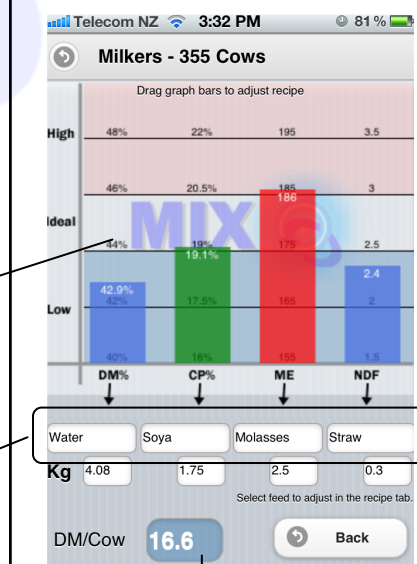
Grass feed values

Grass only DM/Cow

Total DM / Herd liveweight

Total DM/Cow including all supplements from the recipe and the grass.

View Analysis graph



Grass		Recipe
Feed	Kgs	DM/Cow
Maize	5916.7	5.5
PKE	788.9	2
Soya	690.3	1.75
Straw	112.1	0.3
Molasses	1183.3	2.5
Water	1448	4.08
Total Kgs	10,263	DM/ Cow 12.40

Round the selected (or all) feed to nearest 0.25, 0.5 or 1kg.

Adjust the selected feed up or down by 0.25kg.

Drag the bars to adjust the recipe. Blue is too low, red is too high, green just right. Note: The tighter the target range the easier this feature is to use. Great for guiding staff—"Keep it in the green"

Select the feeds to adjust in the graph by clicking on the feed in the "Recipe" tab. (Not the main screen)



Use this screen to plan your annual feed budget. This helps plan feed contracts and cashflows. iPad screen shown to display all the columns. A PC in Google Chrome will display the complete screen, similar to an iPad. Just remember to import your recipes first.

The Back button returns you to the Budgets/ Contracts screen. Remember leaving the deliveries screen will Export the data to farmmates.com if there is an internet connection.

Enters the value from the box to the left into the highlighted cell.

Takes you to the Months screen

Annual Plan									
Enter text here		Enter		Months					
Grass									
Avg Ha	60	Growth/Ha (T)	14.46	Harvest/Ha (T)	12.95	Start Cover	1200		
Cows									
Peak numbers	350	Kgs MS	160000						
Kgs MS/Cow	457.1	Kgs DM/Kgs MS	11.85						
Feed									
	c/Kg	DM T/Cow	Tonnes	\$	Waste %	Graph Colour	CP%	ME	NDF
Grass		2.22	776.8	\$0		Green			
Maize	0.33	1.33	465.9	\$153,731	6	Yellow	8	11	45
PKE	0.27	0.86	299.5	\$80,874		Brown	16	11	0
Soya	0.65	0.4	140.6	\$91,420		Fuchsia	49	10	0
Straw	0.32	0.21	73.7	\$23,585		Wheat	1	1	65
Molasses	0.38	0.19	65.7	\$24,973		Black	8	16	0
Urea	0.80	0.02	7.1	\$5,704		Pink	287	1	0
Maize	0.20	0.19	67.4	\$13,470		Orange	8	11	45
Total supplement		3.2	1119.93	\$393,757		Diet Min.	19	150	4
Total inc. Grass		5.42	1896.77	\$393,757		Diet Max.	21	200	6

Target milksolids for the year.

Feeds to include in the budget.

Farm cover at budget start

Colour the feed will appear on the graph.

Feed values. These are imported from the feed list but you can customise them if needed.

Budget totals for the year

Enter your diet targets here for CP%, ME & NDF. Currently uses the same targets for all mobs.



# ANNUAL PLAN—MONTHS MIX



Use this screen to plan your annual feed budget. This helps plan feed contracts and cashflows. iPad screen shown to display all the columns. A PC in Google Chrome will display the complete screen, similar to an iPad. Just remember to import your recipes first.

The Back button returns you to the Totals screen. Remember leaving the deliveries screen will Export the data to farmmates.com if there is an internet connection.

Enters the value from the box to the left into the highlighted cell.

Graphs the Milkers' diet

Type in your actual farm cover and it will calculate the farm cover from here.

IPad 1:22 PM 51%

Annual Plan

Graph

Enter Mar Molasses

Enter

Grass	40	40	40	40	40	40	40	40	30	30	10	10	20	20	30	30	40	40	75
Demand	16	14.3	16.7	13.7	26.7	31.7	36.7	41.7	34.5	28.8	23	17.3	17.3	22.7	27.5	33	38.5	44	66
Surplus	24	25.7	23.3	26.3	13.3	8.3	3.3	-1.7	-4.5	1.3	-13	-7.2	2.8	-2.7	2.5	-3	1.5	-4	9
Predicted Cover	1560	1971	2298	2667	2867		2150		2133	2153	1958	1849	1890	1847	1885	1837	1860	1800	19
Actual Cover						2100		2200											
Cow Numbers																			
Total Cows	280	280	350	350	350	350	350	350	345	345	345	345	345	340	330	330	330	330	330
Milkers	100	75	50	20	150	200	250	300	345	345	345	345	345	340	330	330	330	330	330
Springers			150	180	200	150	100	50											
Dries	180	205	150	150															
Milkers	100	75	50	20	150	200	250	300	345	345	345	345	345	340	330	330	330	330	330
Grass	6	6	8	8	8	8	8	8	6	5	4	3	3	4	5	6	7	8	12
Maize	3	3	3	4	4.5	4.5	5	5	5	5.5	5.5	5.5	5.5	5.5	5.5	5	4	4	4
PKE	4	4	4	3	3	3	3	3	5	5	5	5.5	5.5	5	5	4	4	3	
Soya			1	2	2	2	2	1.75	1.75	2	2	2	2	2	1	1			
Straw			0.5	0.5	0.5	0.5	0.5	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.5	0.5		
Molasses	0.5	0.5	0.5	0.5	0.5	0.5	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.5	0.5	0.5	0.2
Urea				0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.12	0.12	0.12	0.1	0.1			
Maize																			
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Kgs DM/Cow for the selected feed and period. You can type any text into any cell as a budget note. Only values will be calculated